

K051879



OCT 5 - 2005

3.0 510(k) Summary

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**Sponsor:** Synthes (USA)  
1302 Wrights Lane East  
West Chester, PA 19380  
(610) 719-5000

**Device Name:** Synthes Porous Polyethylene Implants

**Classification:** Class II, § 882.5320 Preformed Alterable Cranioplasty Plate

**Predicate Device:** Porex Surgical, Inc.: MedPor Craniofacial Implants with Embedded Titanium Mesh  
Porex Surgical, Inc.: MedPor Barrier Surgical Implant Biomaterials  
Porex Medical: Medpor Surgical Implants  
ePor Inc.: Porous HDPE Surgical Implants

**Device Description:** Synthes porous polyethylene implants are made from ultra-high molecular weight polyethylene (UHMWPE) or a combination of UHMWPE and titanium for use in anatomical reconstruction of the craniofacial skeleton. These implants are available, with and without embedded titanium, in porous and porous/smooth sheets of various shapes and dimensions. The interconnected, open pore structure of Synthes porous polyethylene implants allows for tissue ingrowth. Synthes porous polyethylene implants are intended for single-patient use only.

**Intended Use:** Synthes porous polyethylene implants are intended for use in non-load bearing applications in craniofacial reconstruction, cosmetic surgery, and repair of craniofacial trauma.

**Substantial Equivalence:** Documentation was provided which demonstrated the Synthes Porous Polyethylene Implants are substantially equivalent to other legally marketed devices.

The term "substantial equivalence" as used in this 510(k) notification is limited to the definition of substantial equivalence found in the Federal Food, Drug and Cosmetic Act, as amended and as applied under 21CFR 807, Subpart E under which a device can be marketed without premarket approval or reclassification. A determination of substantial equivalency under this notification is not intended to have any bearing whatsoever on the resolution of patent infringement suits or any other patent matters. No statements related to, or in support of substantial equivalence herein shall be construed as an admission against interest under the US Patent Laws or their application by the courts.



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Food and Drug Administration  
9200 Corporate Boulevard  
Rockville MD 20850

Kathy Anderson  
Regulatory Affairs Manager  
Synthes (USA)  
1302 Wrights Lane East  
West Chester, PA 19380

Re: K051879

Trade/Device Name: Synthes Porous Polyethylene Implants  
Regulation Number: CFR 882.5320  
Regulation Name: Preformed alterable cranioplasty plate  
Regulatory Class: II  
Product Code: GWO, FTM, FTL  
Dated: July 8, 2005  
Received: July 11, 2005

Dear Ms. Anderson:

We have reviewed your Section 510(k) premarket notification of intent to market the device referenced above and have determined the device is substantially equivalent (for the indications for use stated in the enclosure) to legally marketed predicate devices marketed in interstate commerce prior to May 28, 1976, the enactment date of the Medical Device Amendments, or to devices that have been reclassified in accordance with the provisions of the Federal Food, Drug, and Cosmetic Act (Act) that do not require approval of a premarket approval application (PMA). You may, therefore, market the device, subject to the general controls provisions of the Act. The general controls provisions of the Act include requirements for annual registration, listing of devices, good manufacturing practice, labeling, and prohibitions against misbranding and adulteration.

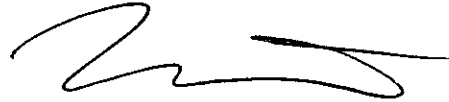
If your device is classified (see above) into either class II (Special Controls) or class III (PMA), it may be subject to such additional controls. Existing major regulations affecting your device can be found in the Code of Federal Regulations, Title 21, Parts 800 to 898. In addition, FDA may publish further announcements concerning your device in the Federal Register.

Please be advised that FDA's issuance of a substantial equivalence determination does not mean that FDA has made a determination that your device complies with other requirements of the Act or any Federal statutes and regulations administered by other Federal agencies. You must comply with all the Act's requirements, including, but not limited to: registration and listing (21 CFR Part 807); labeling (21 CFR Part 801); good manufacturing practice requirements as set forth in the quality systems (QS) regulation (21 CFR Part 820); and if applicable, the electronic product radiation control provisions (Sections 531-542 of the Act); 21 CFR 1000-1050.

This letter will allow you to begin marketing your device as described in your Section 510(k) premarket notification. The FDA finding of substantial equivalence of your device to a legally marketed predicate device results in a classification for your device and thus, permits your device to proceed to the market.

If you desire specific advice for your device on our labeling regulation (21 CFR Part 801), please contact the Office of Compliance at (240) 276-0210. Also, please note the regulation entitled, "Misbranding by reference to premarket notification" (21CFR Part 807.97). You may obtain other general information on your responsibilities under the Act from the Division of Small Manufacturers, International and Consumer Assistance at its toll-free number (800) 638-2041 or (301) 443-6597 or at its Internet address <http://www.fda.gov/cdrh/dsma/dsmamain.html>

Sincerely yours,



for Mark N. Melkerson  
Acting Director  
Division of General, Restorative,  
and Neurological Devices  
Office of Device Evaluation  
Center for Devices and  
Radiological Health

Enclosure

2.0

**Indications for Use**510(k) Number (if known): K051879Device Name: Synthes (USA) Porous Polyethylene Implants**Indications for Use:**

Synthes Porous Polyethylene implants are intended for use in non-load bearing applications in craniofacial reconstruction, cosmetic surgery, and repair of craniofacial trauma.


Prescription Use X  
(Per 21 CFR 801.109)

AND/OR

Over-The-Counter Use \_\_\_\_\_  
(21 CFR 807 Subpart C)

(PLEASE DO NOT WRITE BELOW THIS LINE - CONTINUE ON ANOTHER PAGE IF NEEDED)

Concurrence of CDRH, Office of Device Evaluation (ODE)

  
**(Division Sign-Off)**  
**Division of General, Restorative,**  
**and Neurological Devices**510(k) Number K051879